

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	SPOLTORE, MICHAEL THOMAS
Application Number	10/750,087
Filing Date	12/31/2003
Title	BUILDING OCCUPANT LOCATION AND FIRE DETECTION SYSTEM
Docket Number	H0006017-0555
Examiner	NGUYEN, HUNG T
Art Unit	2636

BRIEF ON BEHALF OF MICHAEL THOMAS SPOLTORE

This is an Appeal from the Final Rejection of Claims 40-78 by the Office Action of January 10, 2006.

REAL PARTY IN INTEREST

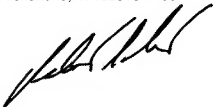
The real parties in interest are the inventor Michael Thomas Spoltore and Honeywell International Inc.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being transmitted on the date below to:
Appeal Related Matters*
Board of Patent Appeals and Interferences
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Registration No. 124,1681 Date: June 5, 2006

STATUS OF THE CLAIMS

Claims 40-43, 48, 51, 54, 56-57, 59-62, 65, 67-68, 70-71 & 73-78 are! rejected!! No claim is! allowed.!

STATUS OF ALL AMENDMENTS FILED SUBSEQUENT TO FINAL REJECTION

An! after! final! response! under! 37! C.F.R.! §! 1.116! was! filed! with! a! March! 3,! 2006! mailing! certificate! A! subsequent! advisory! action! dated! March! 28,! 2006! in! response! thereto! stated! the! amendment! under! 37! C.F.R.! §! 1.116! would! be! entered! for! the! purposes! of! appeal.

SUMMARY OF CLAIMED SUBJECT MATTER

The! bracketed! terms! below! reference! the! corresponding! portions! of! the! application.

[page! 1,! line! 6]

The! invention! relates! to! safety! and! security! devices! and! methods! and! particularly! to! apparatus! and! methods! for! locating! individuals! in! a! building! during! an! emergency!! One! such! emergency! situation! may! occur! during! a! fire.

[page! 3,! line! 21]

Establishing! the! location! of! individuals! within! a! building! during! a! fire! is! critical! to! individuals! that! may! be! trapped! in! the! building! as! well! as! to! individuals! seeking! to! rescue! them!! Many! firefighters! have! died! attempting! to! rescue! individuals! that! have! been! reported! might! be! in! a! building!! It! is! particularly! sad! when! a! firefighter! dies! seeking! to! rescue! an! individual! that! is! subsequently! determined! to! have! been! in! no!

danger.!

It is an object of the present invention to provide an additional measure of safety both for building occupants as well as emergency workers such as firefighters.

More particularly, it is another object of the invention to provide rescue workers very specific information about the location of individuals within a building.!

[page 3, line 21]

The claimed invention includes a system and method for providing assistance to emergency personnel that includes apparatus for detecting the presence of personnel within a protected premises, apparatus for detecting an imminent threat selected from the group consisting of a fire, seismicological and terrorist events and apparatus responsive to the means for detecting, for displaying the location of personnel within protected premises.

In some forms of the invention the system includes apparatus for storing the location of personnel within a protected premises that may include nonvolatile memory and may be capable of storing such data for a plurality of time periods. The system is thus proactive in that it stores the location of personnel in advance of any emergency.

The apparatus for detecting an imminent threat may include an ionization-type detector or a photoelectric detector or temperature sensing and may utilize fuzzy logic or Boolean logic. The temperature sensing apparatus may utilize one or more thermistors. Some forms of the apparatus in accordance with the invention may include structure for determining the last known good position information.

The apparatus for detecting the presence of personnel may also include ultrasonic apparatus, microwave apparatus, infrared sensing or a combination of both passive infrared and microwave sensors.

The decision-making process in the apparatus may be achieved when a logic circuit or a microprocessor. The apparatus for displaying the location of personnel within protected premises may include a floor plan on which the locations are defined and may include wireless apparatus for remotely displaying the location of personnel within protected premises.

[page 4, line 17]

The invention also includes a method for providing assistance to emergency personnel which includes detecting the presence of personnel within a protected premises, detecting an imminent threat selected from the group consisting of a fire, seismological and terrorist events, displaying the location of personnel within protected premises when an imminent threat is detected, further including the step of storing the location of personnel within protected premises, wherein the step of storing the location of personnel is achieved with nonvolatile memory.

The method for providing assistance to emergency personnel includes the step of storing the location of personnel for personnel within a protected premises for each of a plurality of time periods. The method for providing assistance to emergency personnel includes providing apparatus that includes a providing one such apparatus selected from the group that includes (a) ionization-type detector, (b) a photoelectric detector, (c) fuzzy logic, (d) Boolean logic, (e) temperature sensing, (f) ultrasonic apparatus, (g) at least one thermistor, (h) microwave apparatus and (i) infrared sensing.

The drawing (copy attached) illustrates graphically the steps of intrusion detection combined with the creation of historical data storage that is available prior to a fire or

other event being detected.

ISSUES

1.!! Whether! Claims! 40-43,! 48,! 51,! 54,! 56-57,! 59-62,! 65,! 67-68,! 70-71! &! 73-78! are! unpatentable! under! 35! USC.! 102(b)! as! being! unpatentable! over! McKay! Patent! Application! Publication! (U.S.! 2001/0036832)! in! view! of! Kulesz! et! al.! (U.S.! 6,930,596).

2.!! Whether! Claims! 44-47! are! unpatentable! under! 35! U.S.C.! 103(a)! as! being! unpatentable! over! McKay! Patent! Application! Publication! (U.S.! 2001/0036832)! in! view! of! Kulesz! et! al.! (U.S. 6,930,596)! and! further! view! of! Wiemeyer! (U.S.! 5,726,633).

3.!! Whether! Claims! 49-50! are! unpatenable! under! 35! U.S.C.! 103(a)! as! being! unpatentable! over! McKay! Patent! Application! Publication! (U.S.! 2001/0036832)! in! view! of! Kulesz! et! al.! (U.S. 6,930,596)! and! further! in! view! of! Addy! (U.S.! 6,084,522).

4.!! Whether! Claims! 52-53! &! 63-64! are! unpatentable! under! 35! U.S.C.! 103(a)! as! being! unpatentable! over! McKay! Patent! Application! Publication! (U.S.! 2001/0036832)! in! view! of! Kulesz! et! al.! (U.S.! 6,930,596)! and! further! in! view! of! Hackett! (U.S.! 4,035,798).

5.!! Claims! 55! &! 66! are! rejected! under! 35! U.S.C.! 103(a)! as! being! unpatentable! over! McKay! Patent! Application! Publication! (U.S.! 2001/0036832)! in! view! of! Kulesz! et! al.! (U.S. 6,930,596)! and! further! in! view! of! Katz! et! al.! (U.S.! 6,188,318).

6.!! Whether! Claims! 58, 69! &! 72! are! unpatentable! under! 35! U.S.C.! 103(a)! as! being! unpatentable! over! McKay! Patent! Application! Publication! (U.S.! 2001/0036832)! in! view! of! Kulesz! et! al. (U.S.! 6,930,596)! and! further! in! view! of! Lepkofker! et! al.! Patent!

Application Publication (U.S. 2004/0021569).

GROUPING OF CLAIMS

The claims do not stand or fall together.

THE ARGUMENT

ISSUE 1: REJECTION

The final rejection in the office action of January 3, 2006 stated:

"2. Claims 40-43, 48, 51, 54, 56-57, 59-62, 65, 67-68, 70-71, & 73-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKay Patent Application Publication (U.S. 2001/0036832) in view of Kulesz et al. (U.S. 6,930,596).

Regarding claim 40, McKay discloses a system (30) for providing assistance to emergency personnel (14) in a building (12) in one fire condition [figs. 1-2, 4, paragraphs

0013-0014, 0017] comprising:

- a means for detecting presence of personnel / firefighters (14) within a protected premises (12) at a real time [figs. 1-2, 4, paragraphs 0012-0014, 0017];

- a remote receiver (48) includes a computer system (44, 84) having a memory device is inherently for storing the firefighter signals is cited in figs. 2, 4, 6, paragraphs 0014, 0017, 0019.

- a fire truck having a server (128) comprising a memory device for storing data information as each of the firefighter (14) having a tag (16, 40) is attached for monitoring condition of firefighter in three positioning (32, 33, 34) at a real time period [figs. 1-2, 6, paragraphs 0014, 0019, 0022].

It means for displaying by a computer monitor (46,82) the presence of the firefighters (14) within a protected premises at a real time [figs. 1-2, 4, -paragraphs 0013-0014, 0017]

The reference of McKay does not specifically mention exactly a term as subsequently detecting as claimed by the applicant.

However, Kulesz teaches a communication network system which can be employed by fire department, police, or emergencies rescue team to response as detecting (20,61-65) of hazardous events as high temperature, chemical, biological, nuclear, explosive, dirty bomb (72), earthquake and so on wherein the hazardous material is detected to a subsequent different location is monitored by a controller (70) [figs. 3-4, col. 5, lines 39-52 and col. 7, line 62 to col. 8, line 33].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Kulesz in the system of McKay for detecting & monitoring subsequent fire, subsequent earthquake, subsequent bomb conditions. -

Regarding claims 41-43, McKay discloses the system for providing assistance to emergency personnel (14) at a building (12) is on fire condition from a fire truck having a server (128) comprising a memory device for storing data information as each of the firefighter (14) having a tag (16,40) is attached for monitoring condition of firefighter in three positioning (32,33,34) at a real time period [figs. 1-2, 6, paragraphs 0014, 0017, 0019, 0022].

Regarding claims 48 & 54, McKay does teach the system is used for fire department could be included various environmental sensor as temperature, infrared, oxygen, gas or so on may connect to wearable computer (102) for firefighter to detecting the condition in the fire building (12) [fig. 5, paragraph 0018].

Regarding claim 51, McKay discloses the system for providing assistance to emergency personnel (14) at a building (12) is on fire condition from a fire truck having a server (128) comprising a memory device for storing data information as each of the firefighter (14) having a tag (16,40) is attached for monitoring condition of firefighter in three positioning (32,33,34) at a real time period [figs. 1-2,4,6, paragraphs 0014,0017,0019,0022].

Regarding claims 56-57, McKay discloses the system for providing assistance to emergency personnel (14) at a building (12) is on fire condition [figs. 1-2, paragraphs 0013-0014] comprising:

-1 means for detecting the presence of personnel // firefighters (14) having a tag (16,40) within a protected promises (12) at a real time by a wireless signal // GPS receiver [figs. 1-2, paragraphs 0012-0014];

-1 means for displaying by a computer monitor (46,82) as showing the presence of the firefighters (14) within a protected promises at a real time which having a circuit component // microprocessor in the computer system (44) is inherently [figs. 1-2,4,6, paragraphs 0013-0014,0017].

Regarding claims 59 & 70, McKay discloses the system (30) is installed in an emergency fire truck (18) which to monitor the firefighters (14) in the building (12) is on fire condition by a remote signal [figs. 1-2,5, paragraphs 0013-0014 and 0018];

-1 means for detecting the presence of personnel // firefighters (14) having a tag (16,40) within a protected promises (12) at a real time by a wireless signal // GPS receiver [figs. 1-2, paragraphs 0012-0014 and 0018];

-1 means for displaying by a computer monitor (46,82) the presence of the firefighters (14) within a protected promises at a real time from the emergency fire truck [figs. 1-2,4, paragraphs 0013-0014,0017].

Regarding claim 60, McKay discloses the system (30) for providing assistance to emergency personnel (14) at a building (12) is on fire condition [figs. 1-2, paragraphs 0013-0014, 0017] comprising:

-1 means for detecting the presence of personnel (14) having a tag (16,40) within a protected premises (12) at a real time by a wireless signal (GPS) receiver [figs. 1-2, paragraphs 0012-0014 and 00181;

-1 means for displaying by a computer monitor (46,82) the presence of the firefighters (14) within a protected premises at a real time from the emergency fire truck [figs. 1-2,4, paragraphs 0013-0014, 0017].

-1 the system for providing assistance to emergency personnel (14) at a building (12) is on fire condition from a fire truck having a server (128) comprising a memory device for storing data information as each of the firefighter (14) having a tag (16,40) is attached for monitoring condition of firefighter in three positioning (32,33,34) at a real time period [figs. 1-2,6, paragraphs 0014, 0017, 0019, 0022].

Regarding claims 61-62, McKay does teach the system is used for fire department could be included various environmental sensor as temperature, infrared, oxygen, gas or so on may connect to wearable computer (102) for firefighter to detecting the condition in the fire building (12) [fig. 5, paragraph 0018];

-1 means for displaying by a computer monitor (46,82) the presence of the firefighters (14) within a protected premises at a real time from the emergency fire truck [figs. 1-2, 4, paragraphs 0013-0014, 0017].

-1 the system for providing assistance to emergency personnel (14) at a building (12) is on fire condition from a fire truck having a server (128) comprising a memory device for storing data information as each of the firefighter (14) having a tag (16,40) is attached for monitoring condition of firefighter in three positioning (32,33,34) at a real time period [figs. 1-2,6, paragraphs 0014, 0017, 0019, 0022].

Regarding claim 65, McKay does teach the system is used for fire department could be included various environmental sensor as temperature, infrared, oxygen, gas or so on may connect to wearable computer (102) for firefighter to detecting the condition in the fire building (12) [fig. 5, paragraph 0018].

Regarding claims 67-68, McKay discloses the system (30) for providing assistance to emergency personnel (14) in a building (12) is on fire condition [figs. 1-2, 4, paragraphs 0013-0014, 0017] comprising:

- means for detecting the presence of personnel // firefighters (14) having a tag (16, 40) within a protected premises (12) at a real time by a wireless signal // GPS receiver [figs. 1-2, paragraphs 0012-0014 and 0018];

- means for displaying by a computer monitor (46, 82) the presence of the firefighters (14) within a protected premises at a real time from the emergency fire truck, the receiver (48) which having a circuit component // microprocessor in the computer system (44, 84) is inherently [figs. 1-2, 4, 6, paragraphs 0013-0014, 0017].

Regarding claim 71, McKay discloses the system (30) for providing assistance to emergency personnel (14) in a building (12) is on fire condition [figs. 1-2, 4, paragraphs 0013-0014, 0017] comprising:

- means for detecting presence of personnel // firefighters (14) within a protected premises (12) at a real time [figs. 1-2, 4, paragraphs 0012-0014, 0017];

- means for displaying by a computer monitor (46, 82) the presence of the firefighters (14) within a protected premises at a real time [figs. 1-2, 4, paragraphs 0013-0014, 0017]

- the computer monitor (46, 82) is connected to input device // keypad // console (42) from the computer system is inherently (44, 84) [figs. 1-2, 4, paragraphs 0013-0014, 0017].

Regarding claim 73, McKay discloses the system (30) for providing assistance to emergency personnel (14) at a building (12) is on fire condition [figs. 1-2, 4, paragraphs 0013-0014, 0017] comprising:

- the means for detecting presence of personnel (14) within a protected premises (12) at a real time [figs. 1-2, 4, paragraphs 0012-0014, 0017];

- the means for displaying by a computer monitor (46, 82) as showing the presence of the firefighters (14) within a protected premises at a real time [figs. 1-2, 4, paragraphs 0013-0014, 0017].

Regarding claims 74-76 & 78, McKay discloses the method for providing assistance to emergency personnel (14) at a building (12) is on fire condition [figs. 1-2, 4, paragraphs 0013-0014, 0017] comprising:

- a remote receiver (48) includes a computer system (44, 84) having a memory device is inherently for storing the firefighter signals is cited in figs. 2, 4, 6, paragraphs 0014, 0017, 0019.

- the fire truck having a server (128) comprising a memory device for storing data information as each of the firefighter (14) having a tag (16, 40) is attached for monitoring condition of firefighter in three positioning (32, 33, 34) at a real time period [figs. 1-2, 6, paragraphs 0014, 0019, 0022].

Regarding claim 77, McKay does teach the system is used for fire department could be included various environmental sensor as temperature, infrared, oxygen, gas or so on may connect to wearable computer (102) for firefighter to detecting the condition in the fire building (12) [fig. 5, paragraph 0018]."

ISSUE 1: RESPONSE

Claims 40-78 are illustrated by portions of the independent claims listed below (Emphasis added).

"40.!!! A! system! for! providing! assistance! to! emergency! personnel! which! comprises:

apparatus! for! first! detecting! the! presence! of! personnel! within! a! protected! premises;

apparatus! for! continuously! storing! data! defining! the! location! of! personnel! within! a! protected! premises;

apparatus! for! subsequently! detecting! an! imminent! threat! selected! from! the! group! consisting! of! fire,! seismic! and! terrorist! events!;..."

"60.!!!! A! system! for! providing! assistance! to! emergency! personnel! which! comprises:

apparatus! for! first! detecting! the! presence! of! personnel! within! a! protected! premises! and! apparatus! for! storing! the! location! of! personnel! within! protected! premises! that! includes! nonvolatile! memory! and! which! is! capable! of! storing! such! data! for! a! plurality! of! time! periods;

apparatus! for! subsequently! detecting! an! imminent! threat! selected! from! the! group! consisting! of! fire,! seismic! and! terrorist! events!;..."

"73.!!!! A! method! for! providing! assistance! to! emergency! personnel! which! includes:

detecting! the! presence! of! personnel! within! a! protected! premises;

storing data defining the location of personnel within a protected premises;

detecting a subsequent imminent threat selected from a group consisting of a fire, seismicological and terrorist events; ...”

Thus, all of the claims now pending make clear that the detection of a subsequent threat occurs after first detecting the presence of personnel and storing data defining the location of the personnel within a protected premises. (For example, the protected premises might be monitored for years before any fire, seismicological and/or terrorist event is detected.)

The McKay reference describes the background of that invention with: “[0002] Fires in the United States claim the lives of one hundred firefighters each year. A review of this situation by the National Fire Protection Association suggested the application of new technologies for command centers, risk management and individual firefighters. Presently firefighters wear an alarm that emits an audible sound when they have not moved within the last 30 seconds. In the confusion of a fire this audible alarm has provided very little assistance in finding down and injured firefighters. The sound is muffled by the fire and provides only the slightest clue as to the whereabouts of the downed firefighter. Other problems include the inability of the commander to have real time information on the fire as well as the location of the personnel and equipment assets.” Thus, it is abundantly apparent that the reference is clearly directed to monitoring the location of firefighters after a fire has started. There is not even the slightest suggestion, much less a description of any apparatus that would monitor a protected premises so that in the event a fire, seismicological or terrorist event occurs it would be easier to find the people that were in the building before the occurrence of the fire, seismicological or

terrorist event. There is not even the slightest suggestion, much less a description of any apparatus that would in any way track or determine the location of anyone other than firemen who entered the building after the fire started for the express purpose of putting out the fire. Thus, the reference clearly does include:

apparatus for first detecting the presence of personnel within a protected premises and apparatus for storing the location of personnel within protected premises that includes nonvolatile memory and which is capable of storing such data for a plurality of time periods;

apparatus for subsequently detecting an imminent threat selected from the group consisting of fire, seismicological and terrorist events;...

The Examiner states:

"The reference of McKay does not specifically mention exactly a term as subsequently detecting as claimed by the applicant."

It is respectfully submitted the reference not only does not use the terms "subsequently detecting". The reference does not show or suggest subsequent detection of a fire, seismicological or terrorist event after determining the location of anyone, much less the occupants of the building or other protected premises prior to the occurrence of an event selected from the group consisting of fire, seismicological and terrorist events. The references are not proactive. They do not maintain a database of the personnel within a protected premises prior to an emergency. The proactive approach results in a different structure, purpose, method and result than that of the cited art either individually or collectively. The cited art does not consider the location of persons within a protected that were present prior to a fire or other cataclysmic event.

The Examiner further asserts:

"However, Kulesz teaches a communication network system which can be employed by fire department, police, or emergencies rescue team to response (sic) as detecting (20,61-65) of hazardous events as high temperature, chemical, biological, nuclear, explosive, dirty bomb (72), earthquake and so on where the hazardous material is detected to a subsequent, different location is monitored by a controller (70) [figs.3-4, col.5, lines 39-52 and col.7, line 62 to col.8, line 33].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Kulesz in the system of McKay for detecting & monitoring subsequent fire, subsequent earthquake, subsequent bomb conditions." –

Applicant acknowledges that Kulesz teaches a network that includes multiple sensors and emergency responders. In other words, the merely uses a network to detect threats and warn of threats. Nothing in the Kulesz reference remotely describes or suggests the desirability of establishing the location of any person at any time.

It is respectfully submitted that the combination of (1) the McKay reference that teaches tracking fireman after they enter a building after the building is deemed to be burning with (2) the Kulesz reference that never tracks the location of any person at any time does not show or suggest

apparatus for first detecting the presence of personnel within a protected premises and apparatus for storing the location of personnel within protected premises that includes nonvolatile memory and which is capable of storing such data for a plurality of time periods;

apparatus for subsequently detecting an imminent threat selected from the group consisting of fire, seismicological and terrorist events;..."

Stated another way, the combination of a reference that teaches tracking fireman after they enter a building after the building is deemed to be burning with a reference that never tracks the location of any person at any time cannot even be rationally argued to teach the claimed invention.

Applicant does not in any way concede that the combination of references would teach the present invention. Moreover, it is respectfully submitted that the combination of references is not permissible because it fails to meet the established standard:

Karsten Mfg. Co. v. Cleveland Golf Co., 242 F.3d 1376, 1385 (Fed. Cir. 2001) ("In holding an invention obvious in view of a combination of references, there must be some suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to select the references and combine them in the way that would produce the claimed invention.")

In re Dance, 160 F.3d 1339, 1343 (Fed. Cir. 1998) ("When the references are in the same field as that of the applicant's invention, knowledge thereof is presumed. However, the test of whether it would have been obvious to select specific teachings and combine them as did the applicant must still be met by identification of some suggestion, teaching, or motivation in the prior art arising from what the prior art would have taught a person of ordinary skill in the field of the invention.")

In re Fine, 837 F.2d 1071, 1075 (Fed. Cir. 1988) (there must be "some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references")

Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1143 (Fed. Cir. 1985) ("When prior art references require selective combination by the court to

render! obvious! a! subsequent! invention,! there! must! be! some! reason! for! the! combination! other! than! the! hindsight! gleaned! from! the! invention! itself."!).

There! is! not! the! slightest! suggestion! in! McKay! that! when! firefighters! enter! a! burning! building! and! are! tracked! after! the! detection! of! the! fire! and! the! firemen! are! called,! that! thereafter! the! Kulesz! network! system! should! be! " ... detecting! &! monitoring! subsequent! fire,! subsequent! earthquake,! subsequent! bomb! conditions."! Thus,! there! is! not! the! slightest! suggestion,! motivation,! or! teaching! in! McKay! that! would! have! led! a! person! of! ordinary! skill! in! the! art! to! select! the! cited! references! and! combine! them! in! the! way! suggested! by! the! rejection.

Similarly,! there! is! not! the! slightest! suggestion,! motivation,! or! teaching! in! Kulesz! that! the! Kulesz! network! for! sensing! threats! and! alerting! responders! should! be! expanded! to! track! firefighter! responders! that! enter! a! burning! building! as! described! in! McKay.! In! fact,! as! noted! above,! Kulesz! does! not! include! the! slightest! suggestion,! motivation,! or! teaching! that! any! person! should! be! tracked! or! located! anywhere.

ISSUE 2 REJECTION

"3.! Claims! 44-47! are! rejected! under! 35! U.S.C.! 103(a)! as! being! unpatentable! over! McKay! Patent! Application! Publication! (U.S.! 2001/0036832)! in! view! of! Kulesz! et! al.! (U.S.! 6,930,596)! and! further! view! of! Wiemeyer! (U.S.! 5,726,633).

Regarding! claims! 44-45,! The! references! of! McKay! &! Kulesz! do! not! specifically! mention! the! detector! includes! ionization! or! photoelectric! as! claimed! by! the! applicant.

However,! McKay! does! teach! the! system! is! used! for! fire! department! could! be! included! various! environmental! sensor! as! temperature,! infrared,! oxygen,! gas! or! so! on! may!

connect to wearable computer (102) for firefighter to detecting the condition in the fire building (12) [fig. 5, paragraph 0018].

Furthermore, Wiemeyer teaches smoke detector having ionization and photoelectric detectors for discrimination of fire types [col. 1, lines 25-30 and line 40 to col. 2, line 3].

Therefore, it would have been obvious to one having ordinary skill in the art to have the teaching of Kulesz & Wiemeyer in the system of McKay for detecting fire condition which take into account the characteristic of different types of fires.

Regarding claims 4647, Wiemeyer teaches the smoke detector having ionization and photoelectric detectors for discrimination of fire types also mentions a function of fuzzy logic and Boolean logic for signal processing of outputs of tire or smoke sensors as improved performance [col. 1, lines 25-54].”

ISSUE 2 RESPONSE

The remarks above with respect to the combination of McKay and Kulesz are incorporated by reference. These remarks establish that there is no motivation to combine McKay and Kulesz and that combining McKay and Kulesz would not result in the present invention. It follows with still greater force that neither McKay nor Kulesz provide a motivation for combining with Wiemeyer and the combination of McKay, Kulesz and Wiemeyer does not teach the invention defined by these claims.

ISSUE 3 REJECTION

*4. Claims 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over

McKay Patent Application Publication (U.S. 2001/0036832) in view of Kulesz et al. (U.S. 6,930,596) and further in view of Addy (U.S. 6,084,522).

Regarding claims 49-50, The references of McKay & Kulesz do not specifically mention the detector includes thermistors as claimed by the applicant. - However, McKay does teach the system is used for fire department could be included various environmental sensor as temperature, infrared, oxygen, gas or so on may connect to wearable computer (102) for firefighter to detecting the condition in the fire building (12) [fig. 5, paragraph 0018].

Furthermore, Addy teaches temperature sensing wireless smoke detector by using thermistor device (T1) for monitoring the temperature level [fig. 1, col. 2, lines 45-52 and col. 4, lines 31-32].

Therefore, it would have been obvious to one having ordinary skill in the art to utilize the teaching of Kulesz & Addy in the system of McKay for detecting & monitoring the high temperature level in the fire building."

ISSUE 3 RESPONSE

The remarks above with respect to the combination of McKay and Kulesz are incorporated by reference. These remarks establish that there is no motivation to combine McKay and Kulesz and that combining McKay and Kulesz would not result in the present invention. It follows with still greater force that neither McKay nor Kulesz provide a motivation for combining with Addy and the combination of McKay, Kulesz and Addy does not teach the invention defined by these claims.

ISSUE 4: REJECTION

"5. Claims 52-53 & 63-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKay Patent Application Publication (U.S. 2001/0036832) in view of Kulesz et al. (U.S. 6,930,596) and further in view of Hackett (U.S. 4,035,798).

Regarding claims 52-53 & 63-64, The references of McKay & Kulesz do not specifically mention the detector includes ultrasonic and microwave as claimed by the applicant.

However, McKay does teach the system is used for fire department could be included various environmental sensor as temperature, infrared, oxygen, gas or so on may connect to wearable computer (102) for firefighter to detecting the condition in the fire building (12) [fig. 5, paragraph 0018].

Furthermore, Hackett teaches a frequency of ultrasonic or microwave can be used in the detection system in the protected premises or building as desired [fig. 1, col. 1, lines 56-63 and abstract].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Kulesz & Hackett includes a frequency of ultrasonic or microwave in the system of McKay for detecting person or object in the fire building."

ISSUE 4: RESPONSE

The remarks above with respect to the combination of McKay and Kulesz are incorporated by reference. These remarks establish that there is no motivation to combine McKay and Kulesz and that combining McKay and Kulesz would not result in the present invention. It follows with still greater force that neither McKay nor Kulesz

provide a motivation for combining with Hackett and the combination of McKay, Kulesz and Hackett does not teach the invention defined by these claims.

ISSUE 5 REJECTION

"6. Claims 55 & 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKay Patent Application Publication (U.S. 2001/0036832) in view of Kulesz et al. (U.S. 6,930,596) and further in view of Katz et al. (U.S. 6,188,318).

Regarding claims 55 & 66, The references of McKay & Kulesz do not specifically mention the detector includes both passive infrared and microwave sensors as claimed by the applicant.

However, McKay does teach the system is used for fire department could be included various environmental sensor as temperature, infrared, oxygen, gas or so on may connect to wearable computer (102) for firefighter to detecting the condition in the fire building (12) [fig. 5, paragraph 0018].

Furthermore, Katz teaches a dual-sensing intrusion detection device which may includes both passive infrared or microwave sensors can be used in the detection system in the protected premises or building as desired [fig. 1, col. 4, lines 48-60, col. 5, lines 24-50 and abstract].

Therefore, it would have been obvious to one having ordinary skill in the art to have the teaching of Kulesz & Katz in the system of McKay for sensing person & object in the fire building by at least two frequency signals."

ISSUE 5: RESPONSE

The remarks above with respect to the combination of McKay and Kulesz are incorporated by reference. These remarks establish that there is no motivation to combine McKay and Kulesz and that combining McKay and Kulesz would not result in the present invention. It follows with still greater force that neither McKay nor Kulesz provide a motivation for combining with Katz et al. and the combination of McKay, Kulesz and Katz et al. does not teach the invention defined by these claims.

ISSUE 6: REJECTION

"7. Claims 58, 69, & 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKay Patent Application Publication (U.S. 2001/0036832) in view of Kulesz et al. (U.S. 6,930,596) and further in view of Lepkofker et al. Patent Application Publication (U.S. 2004/0021569).

Regarding claims 58 & 69, The references of McKay & Kulesz do not specifically mention the detector includes the display device for displaying the fire fighters on floor plan on the location are defined.

However, McKay does teach the system is used for fire department may detect the presence of personnel / firefighters (14) within a protected premises (12) at a real time [figs. 1-2, 4, paragraphs 0012-0014, 0017];
- means for displaying by a computer monitor (46, 82) the presence of the firefighters (14) within a protected premises at a real time [figs. 1-2, 4, paragraphs 0013-0014, 0017].

Furthermore, Lepkofker teaches a rescue system for tracking persons or things which can be used by the firefighters includes a display device which could display the firefighters (25) in any locations in the building includes floor plan or hallway location [! paragraphs! 0036, 0051-0053].

Therefore, it would have been obvious to one having ordinary skill in the art to have the teaching of Kulesz & Lepkofker in the system of McKay for detecting & displaying the firefighters in any location building.

Regarding claim 72, McKay disclose a system (30) for providing assistance to emergency personnel (14) at a building (12) is on fire condition [figs. 1-2, 4, paragraphs 0013-0014, 0017] comprising:

-! means for detecting presence of personnel /! firefighters (14) within a protected promises (12) at a real time [figs. 1-2, 4, paragraphs! 0012-0014, 0017];

-! means for displaying by a computer monitor (46, 82) as showing the presence of the firefighters (14) within a protected promises at a real time [figs. 1-2, 4, paragraphs! 0013-0014, 0017];

-! remote receiver (48) includes a computer system (44, 84) having memory device is inherently for storing the firefighter signals is cited in figs. 2, 4, 6, paragraphs! 0014, 0017, 0019.

-! the fire truck having a server (128) comprising a memory device for storing data information as each of the firefighter (14) having a tag (16, 40) is attached for monitoring condition of firefighter in the positioning (32, 33, 34) at a real time period [figs. 1-2, 6, paragraphs! 0014, 0019, 0022];

-! the system is used for fire department could be included various environmental sensor as temperature, infrared, oxygen, gas or so on may connect to wearable computer (102) for firefighter to detecting the condition in the fire building (12) [fig. 5, paragraph! 0018].

The reference of McKay & Kulesz do not specifically mention the detector includes the display device for displaying the fire fighters on floor plan on the location are defined.

Furthermore, Lepkofker teaches a rescue system for tracking persons or things 4 which can be used by firefighters includes a display device which could display firefighters (25) in any locations in the building includes floor plan or hallway location paragraphs 0036, 0051-0053].

Therefore, it would have been obvious to one having ordinary skill in the art to have the teaching of Kulesz & Lepkofker in the system of McKay for showing & displaying the firefighters in any location building."

ISSUE 6 RESPONSE

The remarks above with respect to the combination of McKay and Kulesz are incorporated by reference. These remarks establish that there is no motivation to combine McKay and Kulesz and that combining McKay and Kulesz would not result in the present invention. It follows with still greater force that neither McKay nor Kulesz provide a motivation for combining with Lepkofker and the combination of McKay, Kulesz and Lepkofker does not teach the invention defined by these claims.

OBVIOUS TO TRY ISSUES

The rejections in this application inherently, without expressly stating the precise words, argue that the apparatus and method of the present invention are not shown or suggested by the cited art either alone or in combination but it is still obvious for a person having ordinary skill in the art to try based on the cited art. In determining the

obviousness of an invention, the statute, 35 U.S.C. §103, mandates consideration of "the subject matter as a whole" at the time the invention is made. The PTO, the CCPA and the CAFC have also made it clear that hindsight reconstruction of references in light of applicant's disclosure is to be avoided in making such determination. See In re McLaughlin, 170 USPQ 209 (CCPA 1971).

Early decisions of the PTO and the CCPA have repeatedly adhered to the requirement that where two or more references are combined to negative patentability of an invention, the question to be asked is: does the prior art suggest doing what applicant has done? In re Pennington, 113 USPQ 81 (CCPA 1959); In re Wesslau, 147 USPQ 391 (CCPA 1965); Ex parte Walker, 135 USPQ 195 (PO Bd. App. 1961); Ex parte Lennox, 144 USPQ 224 (PO Bd. App. 1964). In Pennington, supra, the CCPA emphasized that the invention may consist of the conception of the general results wished for and/or the actual means of achieving that result, and said, at page 85:

In determining unobviousness of claims to an adjustable collapsible chair, the court in In re Horbman, 121 USPQ 218 (CCPA 1959) said, at page 219:

"For though the structure may be but a simple expedient when the novel concept is realized, that structure may not be obvious to the skilled worker in the art where the prior art has failed to suggest the problem or conceive of the idea for its elimination."

Thus for years, before rejecting an invention for obviousness both the PTO and CCPA looked for a suggestion in at least one reference which could lead one skilled in the art to the claimed invention. The appealed claims in In re Antonie, 195 USPQ 6 (CCPA 1977) were for a waste water treatment device in which a semi-immersed contactor (disk) is continuously rotated in order to aerate the microorganisms that grow on the contactor and the waste water itself. The cited reference disclosed all of the basic features of the device except the ratio of tank volume to contactor area of 0.12 gal./s. ft. This limitation was considered to be critical to the efficient operation of the device. In reversing the Board, and disagreeing with the minority, the court

emphasized that it is the invention as a whole and not just some part of it that must be obvious under 35 U.S.C. §103. The court said, at page 8:

"The PTO, and the minority, appear to argue that it would always be obvious for one of ordinary skill in the art to optimize the effectiveness of the system even if there is no evidence in the record that the prior art recognized that particular parameter affected the results.!! Obvious to try is not the standard of 35 U.S.C. §103."

Thus, for years, the CCPA, and later the CAFC, rejected obvious to try as a standard of obviousness under 35 U.S.C. §103 but required that the reference(s) must suggest the claimed invention as a whole.!! In re Goodwin, 198 USPQ!! (CCPA 1978);!! In re Geiger, 21 USPQ 2d 1276 (Fed. Cir. 1987);!! In re Stencel, 114 USPQ 1071 (Fed. Cir. 1987);!! In re Fine, 151 USPQ 1596 (Fed. Cir. 1988);!! Merck & Co., Inc. v. Biocrافت Laboratories, Inc., 101 USPQ 1843 (Fed. Cir. 1989).!!! Even though for decades since the enactment of the 1952 Patent Act, the PTO, the Board, and the courts have consistently looked for a suggestion in the prior art in order to sustain a rejection under 35 U.S.C. §103, in recent years the term "motivation" had been used, sometimes alone, and at other times mixed with such terms as "incentive" or "suggestion" in obviousness rejections.!! Webster's New International Dictionary, second edition (1957) defines motivation as follows: "to provide with or base upon a motive, to move, to impel, to induce, to incite."

Thus, rejection of an invention based on motivation from the prior art implies that the prior art moves, impels, induces or incites one skilled in the art to make the invention.!! However, as previously discussed, applicant's disclosure is not supposed to be relied on, or even be known, to a person skilled in the art or any other person for that matter.!! Therefore, how can one be moved, impelled, induced or incited to do that which he is not aware of, or to solve a problem which he never knew it existed?

In re Gyurik, 201 USPQ 552 (CCPA 1979) involved an appeal from the rejection of claims to certain thio containing compounds.!! The prior art disclosed structurally similar sulfinyl-containing compounds made from the thio compound as intermediates but the thio compound was never isolated in the prior art process nor its properties

ascertained. The Board agreed with the examiner's rejection that since the thiol compounds were structurally similar to the sulfinyl compounds and the prior art disclosed the latter compounds, albeit as an intermediate, the claimed invention was prima facie obvious. The CCPA reversed, stating, at page 557:

"An element in determining obviousness of a new chemical compound is the motivation of one having ordinary skill in the art to make it. That motivation is not abstract, but practical, and is always related to the properties or uses one skilled in the art would expect the compound to have..."

The court did not find the necessary "motivation" or any "other evidence of motivation" to be present in this case. Although the court did not explain what it meant by "motivation" or what "other evidence of motivation" would have rendered the claimed compound obvious, it appears that the court was looking for some disclosure or suggestion of the property or use of the intermediate product which would have led one skilled in the art to "isolate" the intermediate compound if that person was so inclined to or had any reason to do.

CONCLUSION!!!

Appellant submits that the Examiner is in error in rejecting Claims 48-70 and requests that the Honorable Board reverse the Examiner's position and allow these claims.

Respectfully submitted,



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APPENDIX I -- APPEALED CLAIMS

40. (new) A system for providing assistance to emergency personnel which comprises:

apparatus for first detecting the presence of personnel within a protected premises;

apparatus for continuously storing data defining a location of personnel within a protected premises;

apparatus for subsequently detecting an imminent threat selected from the group consisting of fire, seismicological and terrorist events;

apparatus responsive to the apparatus for subsequently detecting, for displaying the location of personnel within protected premises.

41. (new) A system for providing assistance to emergency personnel as described in claim 40 including apparatus for storing the location of personnel within protected premises.

42. (new) A system for providing assistance to emergency personnel as described in claim 41 wherein said apparatus for storing location of personnel includes nonvolatile memory.

43. (new) A system for providing assistance to emergency personnel as described in claim 42 wherein said apparatus for storing is capable of storing such data for a plurality of time periods.

44.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 40! where! said! apparatus! for! detecting! an! imminent! threat! includes! an!
ionization-type! detector.

45.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 40! wherein! said! apparatus! for! detecting! an! imminent! threat! includes! a!
photoelectric detector.

46.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 40! that! utilizes! fuzzy! logic.

47.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 40! that! utilizes! Boolean! logic.

48.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 40! that! utilizes! temperature! sensing.

49.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 40! that! includes! at! least! one! thermistor.!

50.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 49! that! includes! a! plurality! of! thermistors.

51.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 42! further! including! structure! for! determining! the! last! known! good! position!
information.

52.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 40! wherein! said! apparatus! for! detecting! includes! ultrasonic! apparatus.

53.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 40! includes! microwave! apparatus.

54.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 40! that! includes! infrared! sensing.

55.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 40! that! includes! both! passive! infrared! and! microwave! sensors.

56.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 40! wherein! said! apparatus! responsive! to! said! apparatus! for! detecting! for!
displaying! the! location! of! personnel! within! protected! premises! relies! on! a! logic! circuit!
for! responsiveness.

57.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 40! wherein! said! apparatus! responsive! to! said! apparatus! for! detecting! for!
displaying! the! location! of! personnel! within! protected! premises! relies! on! a!
microprocessor! for! responsiveness.

58.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 40! wherein! the! apparatus! for! displaying! the! location! of! personnel! within!
protected! premises! includes! a! floor! plan! on! which! the! locations! are! defined.

59.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 40! wherein! the! apparatus! for! displaying! includes! wireless! apparatus! for!
remotely! displaying! the! location! of! personnel! within! protected! premises.

60.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! which!

comprises:

apparatus! for! first! detecting! the! presence! of! personnel! within! a! protected! premises!
and! apparatus! for! storing! the! location! of! personnel! within! protected! premises! that!
includes! nonvolatile! memory! and! which! is! capable! of! storing! such! data! for! a! plurality!
of! time! periods;

apparatus! for! subsequently! detecting! an! imminent! threat! selected! from! a! group!
consisting! of! a! fire,! seismic! and! terrorist! events;

apparatus,! responsive! to! the! apparatus! for! detecting,! for! displaying! the! location! of!
personnel! within! protected! premises.

61.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 60! wherein! said! apparatus! for! detecting! an! imminent! threat! utilizes! portions!
selected! from! the! group! consisting! of! an! ionization-type! detector,! a! photoelectric!
detector, fuzzy! logic,! Boolean! logic,! temperature! sensing,! and! at! least! one! thermistor.

62.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 61! further! including! structure! for! determining! the! last! known! good! position!
information.

63.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 60! wherein! said! apparatus! for! detecting! includes! ultrasonic! apparatus.

64.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 60! wherein! said! apparatus! includes! microwave! apparatus.

65.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!

in! claim! 60! wherein! said! apparatus! for! detecting! includes! infrared! sensing.

66.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 60! that! includes! both! passive! infrared! and! microwave! sensors.

67.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 60! wherein! said! apparatus! responsive! to! said! apparatus! for! detecting! for!
displaying! the! location! of! personnel! within! protected! premises! relies! on! a! logic! circuit!
for! responsiveness.

68.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 60! wherein! said! apparatus! responsive! to! said! apparatus! for! detecting! for!
displaying! the! location! of! personnel! within! protected! premises! relies! on! a!
microprocessor! for! responsiveness.

69.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 60! wherein! the! apparatus! for! displaying! the! location! of! personnel! within! a!
protected! premises! includes! a! floor! plan! on! which! the! locations! are! defined.

70.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 60! wherein! the! apparatus! for! displaying! includes! wireless! apparatus! for!
remotely! displaying! the! location! of! personnel! within! protected! premises.

71.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! as! described!
in! claim! 60! wherein! the! apparatus! for! displaying! includes! a! graphic! keypad! and! a!
security! panel! that! allows! selective! visual! monitoring! and! selective! audio! monitoring!
of! a! plurality! of! locations! within! protected! premises.

72.!(new)!!! A! system! for! providing! assistance! to! emergency! personnel! which!

comprises:

apparatus for detecting the presence of personnel within a protected premises and apparatus for storing the location of personnel within protected premises that includes nonvolatile memory and which is capable of storing such data for a plurality of time periods;

apparatus for subsequently detecting an imminent threat that utilizes at least one portion selected from the group consisting of an ionization-type detector, a photoelectric detector, fuzzy logic, Boolean logic, temperature sensing, at least one thermistor, ultrasonic apparatus, microwave apparatus, and infrared sensing;

apparatus responsive to the apparatus for detecting, for displaying the location of personnel within protected premises that includes portions selected from the group selected from the group consisting of a logic circuit, a microprocessor, a floor plan on which the locations are defined, wireless apparatus for remotely displaying the location of personnel within protected premises and a graphic keypad and a security panel that allows selective visual monitoring and selective audio monitoring of a plurality of locations within protected premises.

73. (new) A method for providing assistance to emergency personnel which includes:

detecting the presence of personnel within a protected premises;

storing data defining the location of personnel within a protected premises;

detecting a subsequent imminent threat selected from a group consisting of a fire, a seismological and terrorist events;

displaying the location of personnel within protected premises when an imminent threat is detected.

74. (new)!!! A method for providing assistance to emergency personnel as described in claim 73 wherein the step of storing data defining the location of personnel within a protected premises includes continuously storing data defining the location of personnel within a protected premises.

75. (new)!!! A method for providing assistance to emergency personnel as described in claim 73 wherein the step of storing the location of personnel nonvolatile memory.

76. (new)!!! A method for providing assistance to emergency personnel as described in claim 74 wherein the step of storing the location of personnel includes the step of storing data for personnel within a protected premises for each of a plurality of time periods.

77. (new)!!! A method for providing assistance to emergency personnel as described in claim 73 wherein the step of detecting an imminent threat includes providing apparatus that includes a complement selected from (a.) ionization-type detector, (b.) a photoelectric detector, (c.) fuzzy logic, (d.) Boolean logic, (e.) temperature sensing, (f.) ultrasonic apparatus, (g.) at least one thermistor, (h.) microwave apparatus and (i.) infrared sensing. (new)

78. (new)!!! A method for providing assistance to emergency personnel as described in claim 73 further including the step of determining the last known good position information.

